

- You **cannot use** arrays, with the exception of Arrays.asList shown below
 - You **cannot use** the break or continue statements.
 - If you have questions during this lab do not hesitate to ask your lab demonstrator.
 - All classes **must** start with comments with your name and student number.
1. Write a Java program, SweetDreams, that accepts one line of text from the user and prints that line with e's replaced by 3's and s's replaced by 5's.

Example of user interaction:

Program: enter a line of text

User: sweet dreams

Program: 5w33t dr3am5

ACS-1903-050

ACS-1903L-074

Instead of #2 below you can:

Write a Java program, AnalyzeJava that reads the file AnalyzeJava.java (its own source code) and produces a list of these Java punctuation 7 characters

({ } () ; ,

and their frequencies in the code. You do not have to use ArrayLists as outlined below in #2

2. Write a Java program, AnalyzeJava that reads the file AnalyzeJava.java (its own source code) and produces a list of Java punctuation characters and their frequencies in the code.

Start your program off as:

```
import java.util.Scanner;
import java.util.ArrayList;
import java.io.File;
import java.io.FileNotFoundException;
import java.util.Arrays;
public class AnalyzeJava
{
    public static void main(String[] args) throws FileNotFoundException{
        Scanner f = new Scanner (new File("AnalyzeJava.java"));
        ArrayList<Character> javaPunc = new ArrayList<>(Arrays.asList(
            ';', ' ', '!', ' ', '!', '[', ']', '(', ')',
            '{', '}', '&', '+', '-', '*', '|', '^');
        ArrayList<Integer> javaFreq = new ArrayList<>(Arrays.asList(
            0, 0, 0, 0, 0, 0, 0, 0, 0, 0,
            0, 0, 0, 0, 0, 0));
        System.out.println("examining code for these "+javaPunc.size()
            +" punctuation characters: "+javaPunc);
        System.out.println("initial frequencies are: "+javaFreq)
```

Produce output that starts something like this sample:

```
punc    freq
;         22
,         32
.         33
[         2
etc...
```

Submit the two files

- SweetDreams.java
- AnalyzeJava.java

to the email corresponding **to your lab section** with a **Subject line** Lab8

E.g. if you are registered in lab ACS-1903L-070 then the email address to send to is
1903L-070@acs.uwinnipeg.ca